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PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION: Usama Fayyad et al.

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Serial No. 09/700,606

SEP 06 2001

Filed: January 31, 2001

Technology Center 2100

Title: SCALABLE SYSTEM FOR CLUSTERING OF LARGE DATABASES HAVING
MIXED ATTRIBUTES

Docket No. 14-694 - 4254

WATTS, HOFFMANN, FISHER
& HEINKE, CO., L.P.A.
1100 Superior Avenue, Ste. 1750
Cleveland, Ohio 44114

Assistant Commissioner for Patents
Office of Initial Patent Examination's
Customer Service Center
Washington, D.C. 20231

REQUEST FOR CORRECTED FILING RECEIPT

Sir:

As evidenced by the enclosed copy of page one of the specification, specifically, the first two paragraphs which have been highlighted for your convenience, and the enclosed copy of the Declaration and Power of Attorney, the correct domestic priority data as claimed by applicant should read as follows:

THIS APPLICATION IS A 371 OF PCT/US99/06717 03/29/1999

WHICH IS A CIP OF 09/083,906 05/22/1998

WHICH CLAIMS BENEFIT OF 60/086,410 05/22/1998

I hereby certify that this paper is being deposited with the U.S. Postal Service as 1st Class Mail addressed to the Assistant Commissioner of Patents, Washington, D.C. 20231

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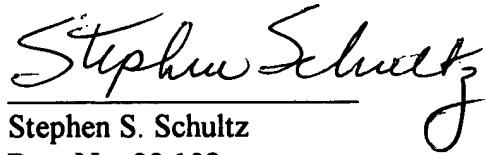
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A copy of the original filing receipt is enclosed which shows the necessary corrections. A corrected filing receipt is respectfully requested.

Respectfully submitted,

Date: June 1, 2001

Telephone: 216-241-6700
Facsimile: 216-241-8151



Stephen S. Schultz
Reg. No. 29,108

JUN 04, 2001

Page 1 of 4



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APPLICATION NUMBER	FILING DATE	GRP ART UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	DRAWINGS	TOT CLAIMS	IND CLAIMS
09/700,606	01/31/2001	2121	1152	14-694-4254	8	34	4

CONFIRMATION NO. 8142

WHD
FILING RECEIPT



"OC000000005992681"

APR 27 2001

Watts Hoffman Fisher & Heinke Company
Suite 1750
1100 Superior Avenue
Cleveland, OH 44114-2518

Watts, Hoffman, Fisher & Co.

Date Mailed: 04/24/2001

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Applicant(s)

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Domestic Priority data as claimed by applicant

THIS APPLICATION IS A 371 OF PCT/US99/06717 03/29/1999
WHICH IS A CIP OF 60/083,906 05/01/1998
WHICH CLAIMS BENEFIT OF 60/086,410 05/22/1998

05/22/98

Foreign Applications

Projected Publication Date: N/A

Non-Publication Request: No

Early Publication Request: No

Title

Scalable system for clustering of large databases having mixed data attributes

Preliminary Class

700

Data entry by : NGUYEN, SON

Team : OIPE

Date: 04/24/2001





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Title 37, Code of Federal Regulations, 5.11 & 5.15

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A Scalable System for Clustering of Large Databases Having Mixed Data Attributes

Cross Reference to Related Applications

The present invention is a continuation in part of co-pending United States patent application serial number 09/083,906 entitled "A Scalable System for Expectation Maximization Clustering of Large Databases" to Fayyad et al having a filing date of May 22, 1998, and which is assigned to the assignee of the present application and is incorporated herein by reference.

Priority is claimed from provisional United States patent application serial number 60/086,410 filed May 22, 1998.

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Field of the Invention

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The present invention concerns database analysis and more particularly concerns an apparatus and method for clustering of data into groups that capture important regularities and characteristics of the data.

Background Art

Large data sets are now commonly used in most business organizations. In fact, so much data has been gathered that asking even a simple question about the data has become a challenge. The modern information revolution is creating huge data stores which, instead of offering increased productivity and new opportunities, can overwhelm the users with a flood of information. Tapping into large databases for even simple browsing can result in a return of irrelevant and unimportant facts. Even people who do not 'own' large databases face the overload problem when accessing databases on the Internet. A large challenge now facing the database community is how to sift through these databases to find useful information.

Existing database management systems (DBMS) perform the steps of reliably storing data and retrieving the data using a data access language, typically SQL. One major use of database technology is to help individuals and organizations make decisions and generate reports based on the data contained in the database.

An important class of problems in the areas of *decision support* and *reporting* are clustering (segmentation) problems where one is interested in finding groupings (clusters) in the data. Data clustering has been used in statistics, pattern recognition,

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